



NATIONAL HEADQUARTERS  
CIVIL AIR PATROL  
UNITED STATES AIR FORCE AUXILIARY  
MAXWELL AIR FORCE BASE, ALABAMA 36112-6332

9 August, 2002

MEMORANDUM FOR CAP WINGS AND REGIONS

FROM: HQ CAP/DOK  
105 SOUTH HANSELL STREET  
MAXWELL AFB, AL 36112-6332

SUBJECT: Guidance For CAP Use of ISR and FRS Radio Equipment

Until recently, CAP had few options for short-range handheld radio communications. The cost of compliant VHF-FM handhelds and the low performance of 26.620 AM radios meant that many CAP activities that had a real need for short-range radio communications frequently had to do without.

When Family Radio Service (FRS) radios began appearing on the market at a reasonable price, many felt that they would provide just what CAP needed in this area. Unfortunately, at that time both National Telecommunications and Information Administration (NTIA) and Department of Defense regulations prohibited federal spectrum users from taking advantage of FRS. NHQ had no choice but to advise commanders and field units that FRS radios were not authorized for CAP use.

However, in response to the need for inexpensive short range communications, DoD frequency managers created a service similar to FRS for use by DoD units. NHQ acquired authorization for CAP to utilize these "Intra Squad Radios" (ISR) which are similar to FRS but operate on DoD frequencies. ISR was introduced to CAP communications managers last year and many units began to acquire and use them with great success.

Shortly thereafter, the NTIA and the Air Force changed their rules regarding the use of FRS radios, and established a limited authorization for their use. ISR is still the preferred service for this type of communications need, but FRS can now be used for some limited applications. The following is a summary of authorized use of both ISR and FRS radios by CAP units. This guidance is intended to inform commanders of the applicable AF and NTIA guidance and allow CAP units to begin operations with these radios prior to the next re-issuance of CAPR100-1.

Intra Squad Radios (ISR)

ISR radios are authorized for all CAP units and activities, except that they must NOT be utilized in flight. Only radios specifically manufactured for the ISR service (currently available only from ICOM) are authorized and they may not be modified in any way, including the addition of external antennas or amplifiers.

Because these radios operate only on federal frequencies, personal use of ISR radios is prohibited. For this reason, it is anticipated that wings will develop policies regarding personal purchase of these radios that will ensure they are not resold or used outside of CAP. Wing DCs have the information needed to purchase these radios directly from ICOM America.

### Family Radio Service (FRS) Radios

While ISR is preferred, the use of FRS radios is authorized IAW Air Force Instruction 33-118. FRS radios are authorized for all CAP units and activities EXCEPT for communications directly supporting Emergency Services (actual missions and training) and any other activity directly involving emergency/disaster response, medical communications, or command and control communications.

Some permissible activities would include encampments, air shows, fund raisers, model rocketry, conferences, meetings and non-direct mission supporting activities of a similar nature. They would also be ideal as a hands on training tool for communications classes. They may not be used while airborne.

All FRS radios and operations must meet FCC Part 95 rules, including the necessity of using FCC-certified FRS equipment. FRS radios must not be modified in any way, and modified/illegal FRS radios are subject to confiscation.

GMRS. Note that this authorization DOES NOT extend to GMRS radios. GMRS is another FCC service which may operate on some of the same frequencies as FRS but at higher power. Unlike FRS, GMRS is a licensed service. A license for a specific geographical area is required and fees are charged by the FCC for this service. Use of GMRS radios is specifically prohibited under both NTIA and Air Force Instructions.

### Procedures

Operations with both ISR and FRS radios should utilize normal CAP operating procedures, including callsigns. It is anticipated that functional callsigns would be utilized for most operations involving these radios.

To operate either FRS or ISR without supervision, operators must have completed Basic Communications User Training (BCUT) and possess a valid CAPF 76 Radio Operator Authorization.

Both ISR and FRS radios operate on frequencies shared with other users. In the case of ISR, these will be other federal spectrum users; with FRS, it could be almost anyone. When establishing and conducting operations with these radios, operators and managers must be alert and ready to take appropriate action if they encounter other

users on the operating channel. Both ISR and FRS are "common use" channels and no user has priority over another. However, to avoid interference, moving to another channel may sometimes be the best course of action. While use of "tone codes" or "privacy codes" will reduce interference, they may not be sufficient, and an organized plan to change frequency if necessary to an alternate is recommended.

For the same reason, CAP's communications on these radios are likely to be monitored, either by another federal agency or by the general public. Make sure your operations are professional and your transmissions something you wouldn't mind being overheard.

A handwritten signature in dark ink, appearing to read "Malcolm C. Kyser Jr.", written in a cursive style.

MALCOLM C. KYSER JR.  
Chief of Communications